

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

VNUS MEDICAL TECHNOLOGIES, INC.

No. C-05-2972 MMC

Plaintiff

ORDER CONSTRUING CLAIMS

v.

DIOMED HOLDINGS, INC., et al.,

Defendant

Before the Court is the parties' dispute regarding the proper construction of ten terms in four patents, specifically, U.S. Patent 6,638,273 ("273 Patent"), U.S. Patent 6,258,084 ("084 Patent"), U.S. Patent 6,752,803 ("803 Patent"), and U.S. Patent 6,769,433 ("433 Patent").¹ Plaintiff Vnus Medical Technologies ("Vnus"), defendants Diomed Holdings, Inc., Diomed, Inc. (collectively, "Diomed"), defendant AngioDynamics, Inc. ("AngioDynamics"), and defendant Vascular Solutions, Inc. ("VSI") have submitted briefs and evidence in support of their respective positions on the disputed terms. The matter came on regularly for hearing on October 30, 2006. Matthew B. Lehr and Suong T. Nguyen of Davis, Polk & Wardwell appeared on behalf of Vnus. Howard A. Slavitt of Coblenz, Patch, Duffy & Bass, LLP, and Michael A. Alpert and Michael N. Rader of Wolf,

¹The claims in which each of the ten disputed terms are found are set forth in Exhibit B to the Amended Patent Local Rule 4-3(b) Chart, filed October 23, 2006.

Greenberg & Sacks, P.C., appeared on behalf of Diomed. William H. Bright, Jr., and Mark D. Giarratana of McCarter & English, LLP, appeared on behalf of AngioDynamics. J. Thomas Vitt of Dorsey & Whitney, LLP, appeared on behalf of VSI.

Having considered the papers submitted and the arguments of counsel, the Court rules as follows.²

1. A Catheter Having A Working End (Claim 1, '803 Patent; Claim 1, '433 Patent)

Vnus argues "catheter," as found in the term "a catheter having a working end" should be construed as "a tubular, flexible, surgical instrument that is inserted into a cavity of the body, including, but not limited to, a sheath," and argues "working end," as found in the subject term, should be construed as "direction toward the treatment site in the patient (contrast with connecting end)." Defendants argue "a catheter having a working end" should be construed as "a hollow, tubular instrument pre-assembled with electrodes capable of applying energy at the end of the instrument proximate the treatment site."³

The Court, for the reasons stated by Vnus, finds "a catheter having a working end" is properly construed as "a tubular, flexible, surgical instrument, including, but limited to, a sheath, having an end directed toward the treatment site in the patient."⁴

2. A Catheter Having A Working End With An Energy Application Device At The Working End (Claims 1 and 18, '084 Patent)

Vnus argues "catheter" and "having a working end," as found in the term "a catheter having a working end with an energy application device at the working end," should be construed as set forth above with respect to the first disputed term, and additionally argues

²Where the Court has adopted a party's proposed construction as to a term, the adopted construction is set forth below without further discussion. Where the Court has adopted one party's construction, but with some modification, an explanation is provided.

³The parties' respective constructions as set forth herein are taken from the Amended Patent Local Rule 4-3(b) Chart, filed October 23, 2006. Any brackets contained in such constructions as set forth herein are in the original.

⁴The Court has not adopted the additional language proposed by Vnus, specifically, "that is inserted into a cavity of the body"; such language is a proposed construction of "into the hollow anatomical structure," which is not one of the ten disputed terms before the Court.

1 the phrase “energy application device,” as set forth in the subject term, should be
2 construed as “a device for delivering energy, such energy includes, but is not limited to, RF
3 energy, microwaves, ultrasound, direct current, circulating heated fluid, radiant light and
4 lasers.” Defendants argue “a catheter having a working end” should be construed as “a
5 hollow, tubular instrument pre-assembled with electrodes capable of applying energy at the
6 end of the instrument proximate the treatment site.”

7 The Court, for the reasons stated by Vnus, finds “a catheter having a working end
8 with an energy application device at the working end” is properly construed as “a tubular,
9 flexible, surgical instrument, including, but limited to, a sheath, having an end directed
10 toward the treatment site in the patient, with a device at that end for delivering energy, such
11 energy including, but not limited to, RF energy, microwaves, ultrasound, direct current,
12 circulating heated fluid, radiant light, laser, and thermal energy.”⁵

13 **3. Effectively Occlude (Claim 1, ‘803 Patent)**

14 Vnus argues “effectively occlude” should be construed as “significantly reduce the
15 flow of blood through the treated hollow anatomical structure, including, but not limited to,
16 full-lumen closure.” Defendants argue “effectively occlude” should be construed as “to
17 shrink the inner diameter of the [hollow structure/vein] to be no smaller than the electrode
18 device, thus reducing but not eliminating the flow of fluid (e.g., blood) through the lumen
19 after the electrode device is removed. The [hollow structure/vein] must maintain this
20 smaller but non-zero diameter with a reduced but continued fluid flow for a lasting (i.e. non-
21 temporary) period.”

22 The Court, for the reasons stated by Vnus, finds “effectively occlude” is properly
23 construed as “significantly reduce the flow of blood through the treated hollow anatomical
24 structure, including, but not limited to, full-lumen closure.”

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26
27 ⁵For the reasons stated above with respect to the first disputed term, the Court has
28 not adopted Vnus’ proposed additional language, specifically, “that is inserted into a cavity
of the body.” The Court has added “thermal energy” to Vnus’ proposed construction. See
‘084 Patent, col. 7, ll. 58-59.

4. Durably Assumes A Smaller Size (Claim 1, '084 Patent)/Durably Assumes A Reduced Size (Claim 1, '803 Patent)

Vnus argues the term “durably assumes a smaller size”/“durably assumes a reduced size” should be construed as “assumption and retention of compressed diameter after treatment smaller than pre-treatment.” Defendants argue the term “durably assumes a smaller size”/“durably assumes a reduced size” should be construed as “the [hollow structure/vein] must maintain this smaller but non-zero diameter with a reduced but continued fluid flow for a lasting (i.e. non-temporary) period. The [hollow structure/vein] must maintain this smaller but non-zero diameter with a reduced but continued fluid flow for a lasting (i.e. non-temporary) period.”

The Court, for the reasons stated by Vnus, finds “durably assumes a smaller size”/“durably assumes a reduced size” is properly construed as “assumes and retains a compressed diameter after treatment smaller than pre-treatment.”

5. Durably Assume A Diameter At Least As Small As The Reduced Diameter Achieved In The Step Of Pre-shaping” (Claim 1, '433 Patent)

Vnus argues “durably assume a diameter at least as small as the reduced diameter achieved in the step of pre-shaping” should be construed in the same manner as “durably assumes a smaller size”/“durably assumes a reduced size,” specifically, “assumption and retention of compressed diameter after treatment smaller than pre-treatment.” Defendants argue “durably assume a diameter at least as small as the reduced diameter achieved in the step of pre-shaping” should be construed in the same manner as “durably assumes a smaller size”/“durably assumes a reduced size,” specifically, “the [hollow structure/vein] must maintain this smaller but non-zero diameter with a reduced but continued fluid flow for a lasting (i.e. non-temporary) period. The [hollow structure/vein] must maintain this smaller but non-zero diameter with a reduced but continued fluid flow for a lasting (i.e. non-temporary) period.”

The Court, for the reasons stated by Vnus, finds “durably assume a diameter at least as small as the reduced diameter achieved in the step of pre-shaping” is properly construed

1 as “assumes and retains a compressed diameter after treatment smaller than pre-
2 treatment.”

3 **6. Remain At the Specific Size (Claim 1, ‘273 Patent)**

4 Vnus argues “remain at the specific size” should be construed in the same manner
5 as “durably assumes a smaller size”/“durably assumes a reduced size” and “durably
6 assume a diameter at least as small as the reduced diameter achieved in the step of pre-
7 shaping,” specifically, “assumption and retention of compressed diameter after treatment
8 smaller than pre-treatment.” Defendants argue “remain at the specific size” should be
9 construed as “until the hollow anatomical structure will maintain the predetermined smaller
10 but non-zero diameter, accommodating ordinary levels of fluid (e.g., blood) flow for a lasting
11 (i.e., non-temporary) period without external compression.”

12 The Court, for the reasons stated by defendants, finds “remain at the specific size” is
13 properly construed as “maintain the predetermined smaller but non-zero diameter for a
14 lasting (i.e., non-temporary) period without external compression.”⁶

15 **7. Positioning . . . At A Treatment Site (Claim 1, ‘803 Patent; Claim 1, ‘273 Patent)**

16 Vnus argues the term “positioning . . . at a treatment site” does not require
17 construction. Defendants argue “positioning . . . at a treatment site” should be construed
18 as “deliberately placing the working end of the catheter in physical contact with the site on
19 the inner wall of the hollow anatomical structure that is to receive energy from the electrode
20 device.”⁷

21 The Court, for the reasons stated by Vnus, finds “positioning . . . at a treatment site”
22 does not require construction.

24 ⁶The Court has not adopted defendants’ proposed additional language, specifically,
25 the phrases “accommodating ordinary levels of fluid (e.g., blood) flow” and “until the hollow
26 anatomical structure will.” Defendants have failed to show the patent requires
accommodation of “ordinary” flow, and the claim already includes the phrase “such that the
hollow structure will.” See ‘273 Patent, col. 19, line 18.

27 ⁷Diomed has taken no position with respect to the construction of disputed terms 7
28 through 10. Accordingly, the reference to “defendants,” for purposes of disputed terms 7
through 10, is a reference to AngioDynamics and VSI only.

8. Pre-shaping (Claim 1, '433 Patent)

Vnus argues the term “pre-shaping” does not require construction. Defendants argue “pre-shaping” should be construed as “applying compression external to the body to shape the vein such that the inner wall of the vein collapses into contact with the electrode device.”

The Court finds “pre-shaping” is properly construed as “applying compression external to the vein to shape.”⁸

9. Applying Energy To (Claim 1, '803 Patent; Claims 1 and 18, '084 Patent)/Applying Energy . . . To (Claim 1, '433 Patent)

Vnus argues the term “applying energy to”/“applying energy . . . to” does not require construction. Defendants argue “applying energy to”/“applying energy . . . to” should be construed as “applying energy directly to the inner wall of the [hollow anatomical structure/vein] through physical contact between the electrode device and the inner wall of the [hollow anatomical structure/vein] and maintaining the electrode device in physical contact with the inner wall.”

The Court, for the reasons stated by Vnus, finds “applying energy to”/“applying energy . . . to” does not require construction.

10. Moving . . . Along (Claims 20 and 21, '084 Patent; Claim 2, '803 Patent; Claim 1, '433 Patent)

Vnus argues the term “moving . . . along” does not require construction. Defendants argue “moving . . . along” should be construed as “moving the electrode catheter along the inner wall of the vein while maintaining physical contact between the electrode and the

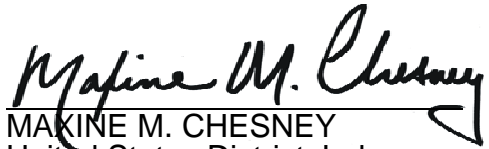
⁸The Court has not adopted defendants’ proposed construction that the compression must be external to the “body”; although the specification states that a tourniquet “can be used” to “externally compress” the vein, see, e.g., '433 Patent, col. 4, ll. 18-25, the specification does not include language limiting the patent to only that manner of external compression. Additionally, the Court has not included in its construction the phrase “the vein such that the inner wall of the vein,” because such language is already included in Claim 1. See id., col. 19, ll. 20-21. Finally, the Court has not included in its construction defendants’ proposed additional phrase “collapses into contact with the electrode device”; such language is a proposed construction of “is brought toward the working end of the catheter,” which is not one of the ten disputed terms before the Court.

1 inner wall of the vein while the electrode applies energy to the vein.”

2 The Court, for the reasons stated by Vnus, finds “moving . . . along” does not require
3 construction.

4 **IT IS SO ORDERED.**

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6 Dated: November 20, 2006

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MAKINE M. CHESNEY
United States District Judge